

having specified viewing angle pixels where the viewing angle of each of the two layers is opposite such that a viewer from the left will see the image displayed one layer and an observer from the right will see the image displayed on the other layer.

[0051] Accordingly in a further aspect of the present invention may be broadly said to consist in a multi-layer multi view display for displaying different images at specified viewing angles comprising:

[0052] i) at least two display layers for the display of images, said display layers being substantially planar and at least in part overlapping, wherein display layer(s) that are overlapping another display layer are selectively transparent,

[0053] ii) a viewing angle manipulation means with a wide viewing angle acting upon at least one display and being located behind at least one display,

[0054] such that images displayed upon display layers that the viewing angle manipulation means is acting on are presented to the viewing angle determined by the viewing angle manipulation means.

[0055] In a preferred embodiment two display layers are overlapped and transparent and are backlit. The front layer has a narrow viewing angle to the left (from the viewer's perspective) behind this is a further narrow viewing angle display but acting upon it is a wide angle diffusion refractor. Hence the images displayed on the rear layer are viewable from a wide viewing angle and the images displayed on the front layer are viewed only from the left (and are viewed as being layered on top of images displayed on the back layer). The diffusing refractor will assist in overcoming the moire interference arising as a result of layering two like substrates.

[0056] Accordingly in a further aspect of the present invention may be broadly said to consist in a multi-layer multi view display for displaying different images at specified viewing angles comprising:

[0057] at least two display layers for the display of images, said display layers being substantially planar and at least in part overlapping, wherein display layer(s) that are overlapping another display layer are selectively transparent,

[0058] wherein at least one of the display layers is an adapted display layer comprising of at least two different specified viewing angle pixels which are interlaced, and all layers to the rear of that adapted display layer (if any) are adapted display layers

[0059] and also comprising at least one an un-braiding viewing angle manipulation means acting upon the adapted display layer(s) behind it,

[0060] such that when at least two images are interlaced and displayed on said adapted display layer, each constituent image of the interlaced image is presented to the viewing angle as determined by the viewing angle of the interlaced specified viewing angle pixels in combination with the unbraiding viewing angle manipulation means.

[0061] Preferably the multi view display is adapted to receive images from a CPU or other image transferring device such as a DVD or video playback.

[0062] Accordingly a further aspect of the present invention comprises a method of operating a multi view display said multi view display having at least two viewing angles characterised by the steps of displaying each images intended for each viewing to the display layer which presents that image to the intended viewing angle.

[0063] Accordingly a further aspect of the present invention comprises display software adapted to facilitate the display of images using multi view display said multi view display having at least two viewing angles said display software being adapted to execute the steps of transmitting each images intended for each viewing to the display layer which presents that image to the intended viewing angle:

[0064] Accordingly a further aspect of the present invention comprises a method of operating a multi view display said multi view display comprising at Least two multi layered display layers characterised by the steps of:

[0065] i) displaying interlaced images on display layers on which an un-braiding viewing angle manipulation means acts

[0066] ii) displaying non-interlaced images on any display layers (if any) on which no un-braiding viewing angle manipulation means acts.

[0067] Accordingly a further aspect of the present invention comprises display software adapted to facilitate the display of images using a multi view display said multi view display comprising at least two multi layered display layers, said display software being adapted to execute the steps of:

[0068] i) transmitting interlaced images to display layer(s), said display layer(s) having an un-braiding viewing angle manipulation means acting upon it (them), said interlaced image being acted upon by said un-braiding viewing angle manipulation means to present the constituent images of the interlaced image to differing viewing angles, and

[0069] ii) transmitting (non-interlaced) image data to display layers (if any) on which no unbraiding viewing angle manipulation means acts said image data being used by said display components to display a images to the viewing angle inherent to said display layer.

[0070] The display layer used in the invention specified in this can be any kind of display device capable of meeting the needs of the embodiment—such as interlacing of pixels or transparency in the case of a multi layered embodiment such display device can be an Liquid Crystal Display (LCD), an Organic Light Emitting Diode Display (OLED) or any other type of display.

[0071] Reference throughout this specification is made the present invention as applying to video display systems. However, it should be appreciated by those skilled in the art that other types of display and imaging systems may be used in conjunction with the invention, not necessarily being video screens such as but not limited to hand held or arcade video games, desktop computers, security monitors, process control system monitors.

#### BRIEF DESCRIPTION OF DRAWINGS

[0072] Further aspects of the present invention will become apparent from the following deposition which is